

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

81 Higuera Street, Suite 200  
San Luis Obispo, California 93401

**ORDER NO. 93-51**

**WASTE DISCHARGE REQUIREMENTS**

**FOR  
CORRAL DE PIEDRA LAND COMPANY AND  
COLD CANYON LANDFILL, INCORPORATED  
TO OPERATE THE  
COLD CANYON CLASS III LANDFILL  
SAN LUIS OBISPO COUNTY**

40-AA-0004

**FINDINGS**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board) finds that:

1. The Corral de Piedra Land Company owns the existing Cold Canyon Class III Landfill, which is operated by Cold Canyon Landfill, Incorporated. For the purposes of this Order, the Corral de Piedra Land Company and Cold Canyon Landfill, Incorporated are hereafter referred to as the "Dischargers" and the Cold Canyon Class III Landfill is hereafter referred to as the "Landfill".
2. The Dischargers submitted a Report of Waste Discharge (ROWD) (*Report of Waste Discharge, Cold Canyon Sanitary Landfill Expansion, San Luis Obispo County, California*, EMCON Associates, October 1992) for the purpose of updating the Landfill's Waste Discharge Requirements to include an approximately 22-acre expansion of the existing landfill. The Dischargers are currently permitted to operate on 67 acres (called the existing landfill) of their approximately 121-acre site. The expansion will provide approximately 4.1 million cubic yards of additional waste capacity and extend the Landfill's service life to approximately 2017.
3. The Dischargers submitted a proposed water quality monitoring program (*Proposed Monitoring Program, Cold Canyon Sanitary Landfill, San Luis Obispo County, California*, EMCON Associates, October 1992) responding to the revised requirements of Title 23, California Code of Regulations (CCR), Div. 3, Chapter 15 (hereafter Chapter 15), Article 5.0.
4. The Landfill is currently regulated by Waste Discharge Requirements Order No. 90-33. Order No. 90-33 does not conform with current requirements of Title 23, California Code of Regulations (CCR), Division 3, Chapter 15, Article 5, as revised July 1, 1991. Waste discharge requirements are being updated to bring the landfill into compliance with applicable regulations and to include current criteria applicable to water quality monitoring and landfill expansion. Compliance with these waste discharge requirements will bring the Landfill into conformance with Chapter 15.
5. This Order rescinds and replaces Order 90-33 adopted by the Board January 12, 1990.

6. The Landfill is eight miles south of San Luis Obispo along State Highway 227, in Sections 28, 29, 32, and 33, T31S, R13E, Mount Diablo Base and Meridian (MDB&M) as shown in Figure 1 included as part of this Order.
7. Land within 1000 feet of the Landfill is used for cattle grazing, scattered domestic residences, and woodlands. Some of the nearby residences utilize private wells for domestic water supply. This Order and corresponding Monitoring and Reporting Program (MRP) are designed to detect any possible ground water degradation prior to it leaving the facility boundary.
8. Wastes are disposed of utilizing the area method of disposal, with refuse lifts averaging 15 feet in thickness. Wastes are placed and compacted in thin layers on a working face sloped no steeper than 3:1.
9. The currently permitted landfill is an existing unlined landfill first operated by Cold Canyon Landfill, Incorporated, in 1965 on land leased from Corral de Piedra Land Company. Currently, the Landfill receives municipal and solid waste from Pismo Beach, San Luis Obispo, Arroyo Grande, Los Osos, Cayucos, Cambria, San Simeon, Morro Bay, and surrounding unincorporated areas. The Landfill received approximately 143,000 tons of waste in 1992. Wastes received are classified as nonhazardous solid wastes or inert wastes using the criteria set forth in Chapter 15.
10. The Landfill meets some criteria contained in Chapter 15 for classification as a Class III landfill suitable to receive non-hazardous solid wastes. The currently permitted, unlined landfill does not meet Chapter 15, Section 2533 siting criteria with regard to "geologic setting". Specifically, size of the waste management unit, permeability and transmissivity of underlying soils, depth to ground water, background quality of ground water,

current and anticipated use of ground water, annual precipitation, etc. do not ensure protection of the quality of ground water or surface water. The landfill does not have a single clay liner with permeability of  $1 \times 10^{-8}$  cm/sec. or less, as required by Section 2533 for landfills which do not meet the "geologic setting" criteria.

11. Section 2510 (b) and (c) of Chapter 15 allows consideration of alternatives to prescriptive standards as follows:

"(b) unless otherwise specified, alternatives to construction or prescriptive standards contained in this subchapter may be considered. Alternatives shall only be approved where the discharger demonstrates that:

- 1) The construction or prescriptive standard is not feasible as provided in subsection (c) of this section, and
- 2) There is a specific engineered alternative that (A) is consistent with the performance goal addressed by the particular construction or prescriptive standard, and (B) affords equivalent protection against water quality impairment.

(c) To establish that compliance with prescriptive standards in this subchapter is not feasible for the purposes of subsection (b) of this section, the discharger shall demonstrate that compliance with a prescriptive standard:

- 1) Is unreasonable and unnecessarily burdensome and will cost substantially more than alternatives which meet the criteria in subsection (b); or

- 2) Is impractical and will not promote attainment of applicable performance standards.

Regional Boards shall consider all relevant technical and economic factors including, but not limited to, present and projected costs of compliance, potential costs for remedial action in the event that waste or leachate is released to the environment, and the extent of ground water resources which could be affected."

12. Pursuant to Chapter 15, Section 2510(b) and (c), the proposed alternative is use of a low permeability hydraulic barrier in all unlined areas of the landfill.
13. The Dischargers propose to continue discharging the following wastes to the Landfill:
- a. Municipal solid waste classified as "nonhazardous solid wastes" or "inert wastes" using the criteria set forth in Chapter 15.
14. The Dischargers' current plans indicate the existing permitted disposal area will reach capacity in 1997. The landfill expansion is planned to extend the service life to 2017.
15. The Dischargers have submitted a site characterization report (*Hydrogeologic Site Characterization, Cold Canyon Sanitary Landfill, San Luis Obispo County, California*, EMCON Associates, February 1992) that expands upon the information contained in an earlier site characterization report (*Hydrogeologic Site Characterization, Cold Canyon Sanitary Landfill, San Luis Obispo County, California*, May 1987). The reports describe the Landfill's geologic and hydrogeologic setting, including possible influences of the Indian Knob Fault, and provide the basis for the proposed water quality monitoring program developed to respond to revised Chapter 15, Article 5.

16. The Landfill is underlain by siltstone, sandstone, and claystone of the Miocene Monterey Formation and flanked on the north by silty sandstone and sandstone of the Undifferentiated member of the Pliocene Pismo Formation, and on the south by sandstone of the Edna member of the Pismo Formation. A thin veneer of Quaternary alluvium covers small areas within the Landfill. The Monterey Formation is characterized by southwest dipping sedimentary rocks which have been faulted and fractured. One important structural feature on site is the Indian Knob Fault, although its influence on the site hydrogeology does not appear significant. The Discharger certified in an October, 1989, "Activity of the Indian Knob Fault..." report the Indian Knob Fault has not been active during the Holocene.
17. Based on the site characterization reports submitted by the Dischargers, ground water at the site occurs in both the Pismo and Monterey formations with the hydraulic head elevation ranging from approximately 190 feet above mean sea level (MSL) at the southern edge of the site to approximately 300 MSL at the northern edge. Depth to ground water measured in on-site monitoring wells ranges from approximately 50 feet southwest of the landfill to 208 feet north of the landfill, as shown on Figure 2.
18. Ground water at the site flows generally from NE to SW under a relatively uniform hydraulic gradient through the undifferentiated member of the Pismo Formation, Indian Knob Fault zone, and Monterey Formation with the gradient being approximately 0.05 foot/foot. As the ground water enters the Edna member of the Pismo Formation, the gradient flattens to approximately 0.01 foot/foot due to higher conductivity. There is a downward vertical gradient, ranging in magnitude from 0.01 to 0.05 feet/foot. In the northern and central part of the site, ground water flow is toward the southwest. In the western part of the site, ground water flow is toward the west. The average ground water velocity is approximately 16 feet per

- year for siltstones and claystones underlying the existing Landfill and 10 feet per year for sandstones underlying the expansion area.
19. The Landfill lies within the Pismo Hydrologic Sub Area of the Point Buchon Hydrologic Area of the Estero Bay Hydrologic Unit. Surface drainage could potentially reach Pismo Creek. The Landfill is not within a 100-year floodplain.
  20. The beneficial uses of surface waters in the vicinity of the Landfill include:
    - a. Domestic and Municipal Supply;
    - b. Agricultural Supply;
    - c. Ground water Recharge;
    - d. Water Contact Recreation;
    - e. Non-Contact Water Recreation;
    - f. Wildlife Habitat;
    - g. Warm Freshwater Habitat;
    - h. Cold Freshwater Habitat;
    - i. Industrial Service Supply;
    - j. Fish Migration; and
    - k. Fish Spawning.
  21. The beneficial uses of ground water in the vicinity of the landfill are:
    - a. Domestic and Municipal Supply;
    - b. Agricultural Supply; and
    - c. Industrial Supply.
  22. Some sampling analyses of various ground water monitoring wells around the landfill have shown detectable levels of chlorinated and aromatic organics. Additional monitoring will be implemented to determine whether the source is the landfill.
  23. The Water Quality Control Plan, Central Coast Basin, (Basin Plan) was revised and adopted by the Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.
  24. The existing Landfill and its expansion are included in, and conform with, the 1986 version of the San Luis Obispo County Solid Waste Management Plan. The Solid Waste Facilities Permit issued by the San Luis Obispo County Division of Environmental Health expired in 1984. The Dischargers are applying for a new Solid Waste Facilities Permit, and these Waste Discharge Requirements are a necessary component of that application. The Landfill is currently authorized to operate under a Notice and Order issued by San Luis Obispo County Division of Environmental Health (as California Integrated Waste Management Board authorized Lead Enforcement Agency) dated July 23, 1991.
  25. The Dischargers have proposed a landfill liner and Leachate Collection and Removal System (LCRS) in the horizontal expansion area to contain waste. The landfill linersystem, which will be constructed on the base and excavated slope of the expansion, is planned to meet or exceed all applicable State (revised Chapter 15, of Division 3 of Title 23 of CCR and Title 14 of CCR) and Federal (40 CFR, Parts 257 and 258 [RCRA Subtitle D]) requirements.
  26. The horizontal expansion will provide a base to allow a partial vertical expansion on old refuse fill.
  27. The San Luis Obispo County Planning Commission certified a final Environmental Impact Report on December 2, 1991, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et. seq.). The findings, prohibitions, specifications, and provisions of this Order are consistent with the certified final Environmental Impact Report.
  28. The final Environmental Impact Report found that the Landfill and landfill activity could have significant impacts on water quality and may degrade water quality unless appropriate measures are taken. The potential significant impacts are intended to be mitigated or avoided by a

series of design measures to control erosion and provide containment of waste and leachate by the use of liners, leachate collection and removal systems, grading, planting, drainage systems, and limits on the physical dimension of the landfill. The mitigation measures are described in the ROWD and these waste discharge requirements.

29. On March 13, 1992, the Discharger submitted a "Notice of Intent" to comply with the State's NPDES stormwater discharge general permit. Regulation of stormwater discharge is by a separate order.
30. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent effluent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
31. On May 7, 1993, the Board notified the Dischargers and interested agencies and persons of its intention to update the waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
32. After considering all comments pertaining to this discharge during a public hearing on July 9, 1993, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED pursuant to authority in Section 13263 of the California Water Code, Corral de Piedra Land Company, and Cold Canyon Landfill, Incorporated, their agents, successors, and assigns (Discharger) may discharge wastes at the Cold Canyon Class III Landfill (Landfill), providing compliance is maintained with the following:

(Note: Other prohibitions and conditions, definitions, and the method of determining compliance are contained in the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984. Applicable paragraphs are referenced in paragraph C.4. of this Order.)

#### A. PROHIBITIONS

1. Discharge to areas other than the horizontal limit of landfill and vertical extent of the landfill as shown on attached Figure 3 is prohibited. Figure 3 contour lines indicate the vertical extent of permitted waste disposal.
2. Discharge of hazardous and designated wastes, is prohibited. For the purposes of this Order, the terms hazardous waste and designated waste are as defined in Chapter 15.
3. Discharge of liquid or semi-solid waste (i.e., waste containing less than 50 percent solids by weight) other than dewatered sewage or water treatment sludge as described in Discharge Specification B.24, and landfill leachate and gas condensate as described in Discharge Specification B.25., is prohibited.
4. Discharge of solid waste containing free liquid or moisture in excess of the waste's moisture holding capacity is prohibited.
5. Discharge of dewatered sewage sludge or water treatment sludge to landfill areas not underlain by a leachate collection and removal system is prohibited.
6. Discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, or ground water is prohibited.
7. Discharge of waste to ponded water from any source is prohibited.
8. Discharge of waste within 50 feet of the property line or within 100 feet of surface waters or domestic supply wells is prohibited.

9. Discharge of the following types of wastes is prohibited:
    - a) wastes which have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products;
    - b) wastes which require a higher level of containment than provided by the Landfill; and,
    - c) wastes which are restricted hazardous wastes, or wastes which impair the integrity of containment structures.
  10. Disposal of wastes within five (5) feet of the highest anticipated elevation of underlying ground water, including the capillary fringe, is prohibited.
  11. Landfill siting on soils with significant liquefaction potential, without mitigation of said potential, is prohibited.
- d) The creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e) The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.
2. The discharge shall not cause an increase in concentration of waste constituents in soil-pore gas, soil-pore liquid, perched water or other geologic materials outside of the unit.
  3. The Dischargers shall conduct intake load-checking as specified by the ROWD, Appendix F "Waste Control Program" and shall monitor for low-level radioactive materials in the incoming waste.
  4. The Dischargers shall remove and relocate any wastes which are discharged in violation of these requirements.
  5. The Dischargers shall prevent formation of a habitat of carriers of pathogenic organisms.

#### B. DISCHARGE SPECIFICATIONS

1. The discharge shall neither cause nor contribute to any surface water contamination, pollution, or nuisance, including, but not limited to:
  - a) Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b) Increases in bottom deposits or aquatic growth;
  - c) An adverse change in temperature, turbidity, or apparent color beyond natural background levels;
2. The discharge shall not cause an increase in concentration of waste constituents in soil-pore gas, soil-pore liquid, perched water or other geologic materials outside of the unit.
3. The Dischargers shall conduct intake load-checking as specified by the ROWD, Appendix F "Waste Control Program" and shall monitor for low-level radioactive materials in the incoming waste.
4. The Dischargers shall remove and relocate any wastes which are discharged in violation of these requirements.
5. The Dischargers shall prevent formation of a habitat of carriers of pathogenic organisms.
6. Construction of the containment features of the expansion must be in compliance with this Order and Chapter 15 and Subtitle D. Wastes shall not be placed in any area of the expansion until approved in writing by the Executive Officer. The Executive Officer must received written certification by a California registered civil engineer or certified engineering geologist that the containment features have been constructed in accordance with the design plans and regulations before waste disposal can be approved.
7. Refuse shall be covered daily by at least six inches of cover material or, if allowed by the Local Enforcement Agency, meet Performance Standards of the California

Code of Regulations, Title 14, Section 17683. Performance standards shall not cause leachate generation nor cause degradation of water quality. Cover shall promote lateral runoff of rainfall away from the active landfill.

8. If adequate soil cover material is not accessible during inclement weather, then such material shall be stockpiled prior to November 1 of each year to assure year-around compliance.
9. By November 1, 1993 and 1994, a minimum of one foot thickness of low permeability soil cover designed to minimize percolation of precipitation through waste shall be placed over all landfill areas which have not already received such cover.
10. By November 1 of each year, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the Landfill and to prevent surface drainage from contacting or percolating through wastes.
11. Beginning November 1, 1995 and November 1 of each year thereafter, a hydraulic barrier (e.g., 2 foot layer of soil with an in-place permeability of  $10^{-8}$  cm/sec or less), with an LCRS if necessary, must be placed in all unlined waste disposal areas. Discharger shall submit a technical report by December 31, 1993, describing how this specification will be achieved. The active disposal area shall be confined to the smallest area practicable based on the anticipated quantity of waste discharge and required waste management facility operations.
12. All waste management units, containment structures, and drainage facilities shall be designed and constructed under the direct supervision of a California registered civil engineer or a certified engineering geologist and shall be certified by that individual as meeting the prescriptive standards and performance goals of Chapter 15 and Subtitle D prior to waste discharge.
13. All landfill facilities shall be designed and constructed to prevent damage during the maximum probable earthquake.
14. Waste management units, containment structures, and drainage facilities shall be designed, constructed and operated to prevent inundation or washout due to floods with a 100-year return period.
15. Water used within the waste management unit shall be limited to the minimum amount necessary for dust control and construction.
16. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes.
17. To prevent erosion and percolation through the waste, drainage ditches crossing over landfill areas shall be lined with either a synthetic liner or at least a one-foot-thick layer of soil having an in-place permeability of  $1 \times 10^{-8}$  cm/sec or less.
18. Areas at final elevations shall be graded to a slope of at least three percent and covered with at least six feet of final cover consisting of, at a minimum, from bottom to top:
  - a. two feet of compacted soil placed over waste as a foundation layer, which will be placed as intermediate cover;
  - b. one foot of compacted low-permeability soil (compacted to attain an in-place permeability of  $1 \times 10^{-8}$  cm/sec or less, or equal to the permeability of any liner system or underlying natural geologic materials, whichever is less permeable) overlying the foundation layer; and,

- c. Three feet of vegetative soil overlying the low-permeability layer, suitable to support vegetation.

(The Executive Officer may approve alternatives to this specification, should alternatives be proposed pursuant to Specification 11 of this Order.)

- 19. Hydraulic conductivity of all low-permeability layers shall be determined by laboratory and in-place field testing. Construction methods and quality assurance procedures shall be submitted to Board staff and shall ensure that all parts of the layers meet the hydraulic conductivity and compaction requirements.
- 20. Lined areas shall comply with all applicable State and Federal regulations.
- 21. Unprotected landfill slopes shall be managed to prevent erosion. Vegetative cover shall be placed as soon as is practicable (e.g., seeded following first fall rains of season) for erosion control.
- 22. Non-hazardous incinerator ash may be discharged in the landfill only when adequate chemical analyses are provided to the Executive Officer demonstrating the waste is not a threat to water quality.
- 23. Methane and other landfill gases shall be adequately vented, removed from the Landfill, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the degradation of water quality.
- 24. Sewage sludge or water treatment sludge with greater than 50% moisture content may be discharged to the waste management unit if all the following criteria are met:
  - a) Sludge shall be discharged only to Waste Management Units that have a dendritic/blanket-type leachate collection and removal system (or acceptable equivalent) immediately

above the liner, which is designed and operated to prevent the development of one foot or more of hydraulic head on the liner at any time.

- b) A daily minimum solids-to-sludge ratio of 5 to 1, based on weight, shall be maintained when co-disposing sludge with solid waste.
- c) Primary and mixtures of primary and secondary sewage sludge shall contain at least 20 percent solids by weight.
- d) Secondary sewage sludge and water treatment sludge shall contain at least 15 percent solids by weight.
- 25. Leachate and landfill gas condensate (from a future landfill gas collection system) may, if uncontaminated, be used for dust control (minimum amount needed) in compliance with Subtitle D. Otherwise, the material shall be disposed in an approved treatment/disposal facility.
- 26. The Dischargers shall design, install, and operate a blanket-type LCRS for the base of the lateral landfill expansion area, and shall not allow hydraulic head on any portion of the liner.
- 27. Leachate collection and removal systems shall be installed immediately above the liner and shall be designed, constructed, operated, and maintained to collect twice the maximum anticipated daily volume of leachate from the lined unit from any waste which could generate leachate potentially draining to the lined unit.
- 28. The Dischargers shall maintain all devices or designed features, installed in accordance with this Order, such that they continue to operate as intended without interruption.
- 29. Board staff shall be notified within 24 hours by phone, with a written report to follow within seven days, of any slope failure or leachate seep occurring in the waste management unit. Any leachate seep or any failure which threatens the

integrity of containment features or the landfill shall be promptly corrected and the methods shall be so stated in the written report.

30. The Discharger shall notify the Board staff at least 180 days prior to beginning any final closure activities. This notice shall include a statement that all closure activities will conform to the most recently approved final closure and postclosure maintenance plan.

31. The Dischargers shall submit, within 90 days after the closure of any portion of the Landfill, a report which documents that closure activities occurred in accordance with the most recently approved final closure and postclosure maintenance plan.

32. **Monitoring Parameters for Detection Monitoring.**

The Monitoring Parameters for samples include: those listed in the Monitoring and Reporting Program (MRP). These Monitoring Parameters are subjected to the most appropriate statistical or nonstatistical test as specified by the MRP.

33. **Additional Monitoring Points or Background Monitoring Points.**

The Dischargers shall, in a timely fashion, install any additional ground water, soil pore liquid, soil pore gas, surface water and leachate monitoring devices as required by the Executive Officer.

34. **Water Quality Protection Standards**

- a. Concentrations of parameters or waste constituents in waters passing through the Points of Compliance shall not exceed the "water quality protection standards" established pursuant to Monitoring and Reporting Program No. 93-51.

- b. Discharge shall not cause a violation of any applicable water quality standard.

35. The Discharger shall comply with Subtitle D, Part 258, Title 40, CFR.

36. All reports submitted shall be certified by a registered civil engineer, registered geologist or certified engineering geologist, as appropriate and required by existing regulation.

### C. PROVISIONS

1. The Dischargers shall obtain and maintain Financial Assurance Instruments (Instruments) which comply with Chapter 15, Title 14, and Subtitle D.

The Dischargers shall submit a report every five years that either validates the instrument's ongoing viability or proposes and substantiates any needed changes [e.g., a documented increase in the monitoring systems' ability to provide reliable early detection of a release can cause a decrease in the Instrument's financial coverage].

2. Order No. 90-33, "Waste Discharge Requirements for Cold Canyon Landfill Site", adopted by the Board on January 12, 1990, is hereby rescinded.

3. Approval of the vertical expansion is contingent upon implementation of an adequate monitoring and reporting program and procurement of satisfactory water quality data and response. The Executive Officer may approve the monitoring and reporting program and resultant data and response, thus allowing the expansion to proceed.

4. The Dischargers shall comply with "Monitoring and Reporting Program No. 93-51," (MRP) as specified by the Executive Officer, which is attached to and made part of this Order.

5. The Dischargers shall comply with the following items of attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984: Nos. A.2., A.3., A.7., A.8., A.14., A.18.-23., A.25., A.26., B.1., B.3.,

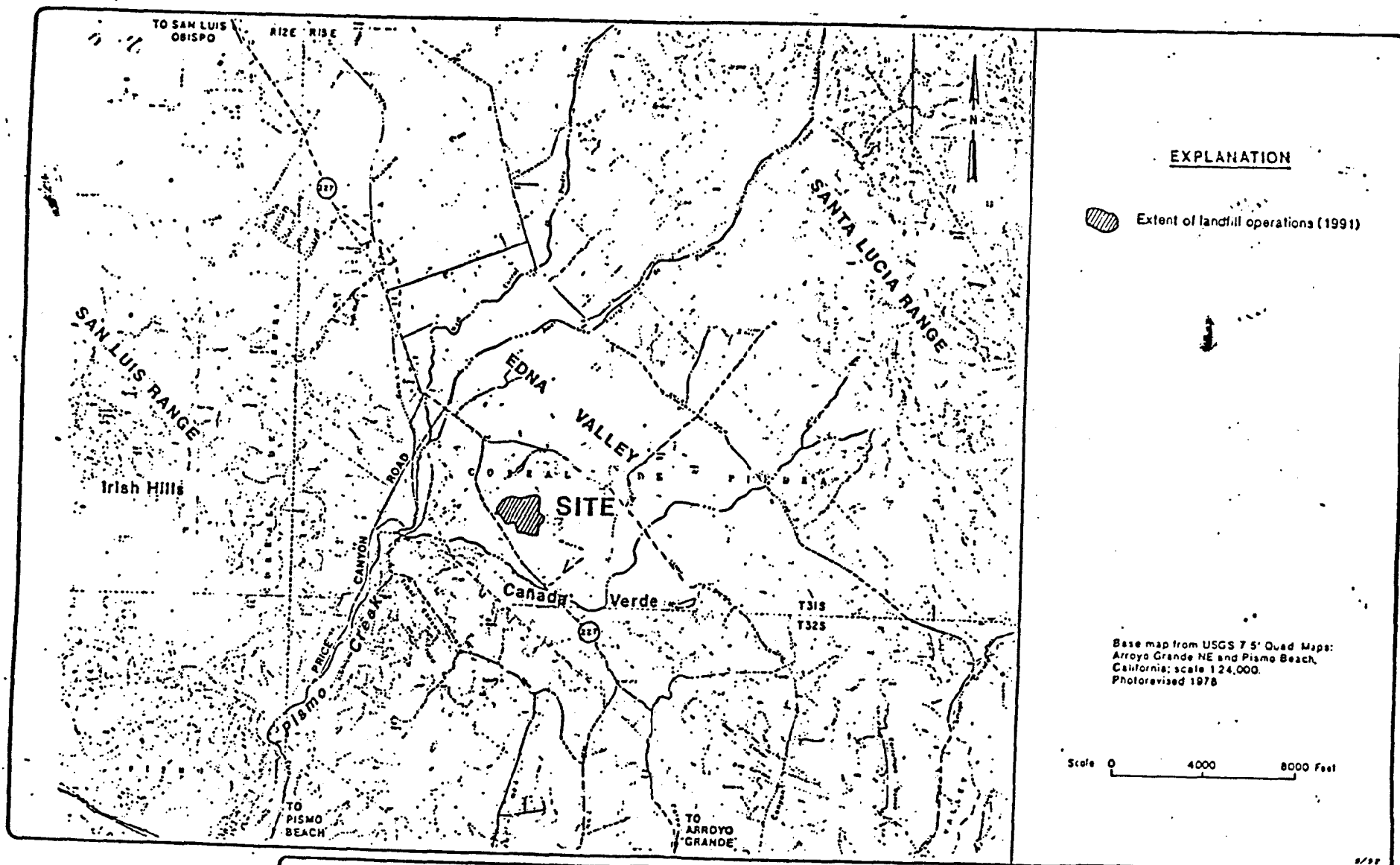
- B.5., B.6., B.7., C.1.-7., C.10.-15., E.1.-4., and F.1.-19. Oral and written reports required by "C.3." shall also be provided to the California Integrated Waste Management Board and the Local Enforcement Agency.
6. The Dischargers' employees must be aware of terms of this Order which pertain to their duties. A copy of this Order shall be available on site for reference at all times.
  7. The Dischargers shall notify the Board staff whenever there is a substantial change in the volume or character of waste discharged. Notice shall include information on the quality and quantity of waste discharged and the anticipated impact of the waste upon water quality and Landfill operations.
  8. This Regional Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge.
  9. By December 31, 1993, the Discharger shall submit a technical report addressing the need for a gas collection system. The report shall address, in part, health and safety issues associated with gas migration to the atmosphere and ground water contamination by gas migration through the vadose zone and shall include an implementation schedule if installation is recommended.
  10. The Dischargers shall submit a complete Report of Waste Discharge at least 180 days prior to any relevant deviation from the Landfill operation and design covered by this Order.
  11. Pursuant to Title 23, Division 3, Chapter 15, Article 9, of the California Code of Regulations, the Dischargers must submit a written report to the Executive Officer not later than July 1, 1998, which:
    - a) Discusses whether there will be changes in the continuity, character, location, or volume of the discharge; and,
    - b) Discusses whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.
  12. The Dischargers shall conduct a study to determine the feasibility of unsaturated zone monitoring and what monitoring methods may be appropriate for a long-term unsaturated zone monitoring system for the waste management unit. The results of this study and a recommended monitoring system shall be provided to the Executive Officer for review and approval by September 1, 1994.
  13. At least 180 days before constructing the composite liner in the lateral Landfill expansion area, the Dischargers shall submit a report to the Executive Officer for approval. The report shall demonstrate that the proposed composite liner design, or an approved engineered alternative, complies with requirements contained in Title 40, Section 258.40 of the Code of Federal Regulations (CFR) and Chapter 15.
  14. At least 180 days before constructing final cover, the Dischargers shall submit a report to the Executive Officer demonstrating that the proposed final cover design complies with requirements contained in Title 40 CFR Section 258.60 or that an alternative final cover design, at least as stringent as the final cover design proposed in the ROWD, has been approved in accordance with Section 258.60.

**July 9, 1993**

15. By no later than October 8, 1993, the Dischargers shall submit to the Executive Officer an amended periodic intake load-checking program incorporating monitoring for low-level radioactive materials in the incoming waste. The low-level radioactive material monitoring shall utilize one fixed microrad radiation detector and one portable radiation monitoring meter capable of measuring gamma and beta radiation. The microrad radiation detector shall be consistent with the description contained in the final Environmental Impact Report.
16. All reports pursuant to this Order shall be prepared under the supervision of a California registered civil engineer, registered geologist, or certified engineering geologist. Such reports shall be signed by the engineer or geologist and shall include their registration or certification number.

I, **WILLIAM R. LEONARD**, Executive Officer, do hereby certify the foregoing is full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coastal Region, on July 9, 1993.

  
Executive Officer

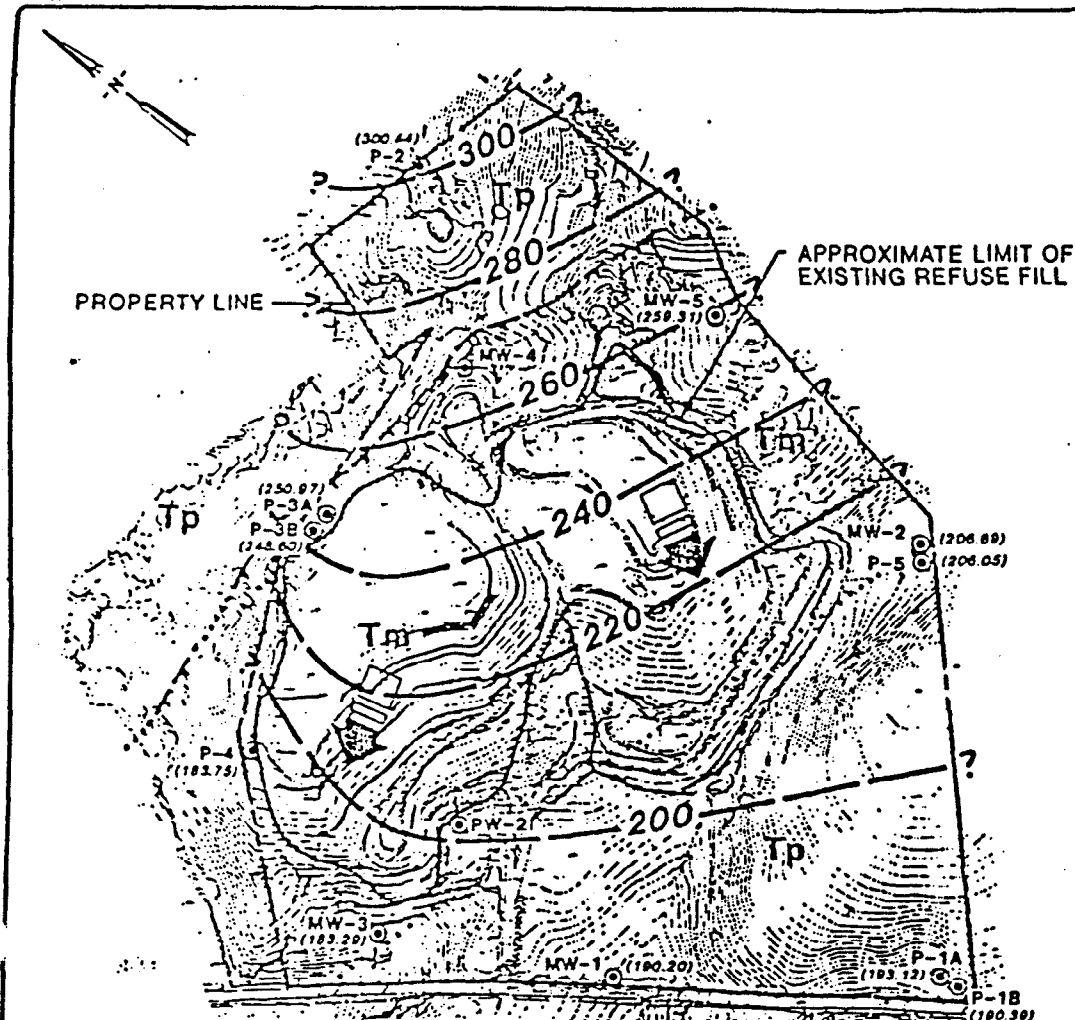


COLD CANYON LANDFILL, INC.  
 COLD CANYON SANITARY LANDFILL  
 PROPOSED MONITORING PROGRAM  
 SAN LUIS OBISPO COUNTY, CALIFORNIA

SITE LOCATION

FIGURE

1



BASE:  
Golden State Aerial Survey, Inc.  
Date of photography: 8/25/89

# EXPLANATION

Tp

Pismo Formation

Tm

Monterey Formation

---... Geologic contact, dashed where approximately located, dotted where concealed

---... Indian Knob Fault, dashed where approximately located, dotted where concealed

⊗ Decommissioned ground-water monitoring well

⊙ Ground-water monitoring well

(206.05) Ground-water elevation (Fl. SL); measured 10/1/91

?---220--- Ground-water elevation contour (Fl.-MSL)

➡ Approximate direction of ground-water flow

## NOTES:

Well PW-2 is a water production well and subject to intermittent pumping. The water surface elevation is considered anomalous and was not used for contouring.

Well MW-4 was decommissioned between the fourth quarter 1990 and the first quarter 1991 monitoring events.

Wells P-1B, P-3B, and P-5 are screened in a deeper portion of the aquifer to characterize the vertical gradient. Their water elevations were not used to generate the contours.

SCALE: 0 400 800 1200 1600 FEET

COLD CANYON LANDFILL, INC.  
COLD CANYON LANDFILL  
SAN LUIS OBISPO COUNTY, CALIFORNIA

GROUND-WATER CONTOURS  
OCTOBER 1991

FIGURE  
2

